Metric Commonality and its Application in Aircraft Engines

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Motivation

Business case: there is a significant need to obtain and understand fleet information from all aircraft engine customers.

Aircraft Engine Program Leaders Note the Lack of Metric Standardization:

"Different customers track different metrics; there is no standardization."

"Engine programs should be based on metrics. Much … long range planning is based on conclusions and assumptions rather than facts [and not] centered on all customer issues."

"Everyone measures things, but not necessarily in the same way."

Does aircraft engine metric commonality exist?

How can it be applied to other aerospace products?

Research Questio

Does metric commonality exist across aircraft engine famili

How do engine customer values drive engine metri

How are engine metrics created during the development phase of engine progra

How are the *proper* metrics chosen for a given engine platfor

When will you tell us how to standardize our metrics?

ENGINE CUSTOMER

ENGINE DEVELOPE

What metrics would you like to see that would benefit your fleet?

Methodology

Literature Review → Initial Stakeholder Interviews → Engine Program Case Study → 2nd Round of Stakeholder Interviews → "Best Practice" Framework for future use

Fall 2008 — May 2010

Expected Contributio

Business case study: current state of metrics and proposed enabl infrastructure to properly store metric d

Methodology in choosing the proper metrics for a given eng platfo

Proposed metrics for development engine produ

Observations in creating and choosing metrics to use for ot aerospace produ